Aviation News

McGRAW-HILL PUBLISHING COMPANY INC. AUGUST 23, 1943 50 CENTS

Additional Air Service for Washington *started when TWA and United Air Lines planes landed at Washington National Airport. Mrs. Jimmy Doolittle christened United's "City of Washington, D. C.," with the assistance of Steward Loretta Nazar, who sold $40,000 in War Bonds on the first trip, and Capt. E. Hamilton Lee, veteran pilot for 25 years.*

Federal Officials Pledge Airliners: Post Office representatives say Army will return more transports to carriers.

★

TWA and United Enter Washington: Ceremonies mark inauguration of regular service from Dayton, Chicago and the West.

★

Truman Report Cuts Engine Output: Hesitancy of inspectors cited as one reason for shortage of high-horsepower plants.

★

Renegotiation Changes Drafted: House subcommittee to consider retention of reserves for post-war conversion.

Adequacy of WMC Order Questioned: Industry men see deferment move as right step but unlikely to solve manpower shortage.

★

Tokyo May See Our Super-Bombers: News' military commentator says new giants meet all requirements for smashing Japan.

★

Plane Production Up in Early August: Important gains over corresponding period of July are reported for first half of month.

★

WPB Studies Pacific Coast Manpower: Three Washington groups touring western aircraft and other war plants.

Washington Observer

The recent speech by Assistant President James F. Byrnes painted up a situation of widespread discussion and speculation in Washington, namely, the privately expressed optimism on the course of the war and the public or official pessimism, salted with warning. At a time when the news from the fronts was never better, Byrnes warned of the long, hard, bloody road ahead and said that it was by no means clear that we are today as near winning the war as the Axis was in the summer of 1940. No sane person would deny that the nation has tough days ahead. But to deny that things look better now than they have for months is to deny the obvious.

*

Back of Byrnes' remarks, considered by some observers as an overstatement of the seriousness of the war task ahead, is the Administration's official campaign to counter over-optimism and over-confidence. This is understandable, in part, but on the other hand the people generally and industry in particular are well aware that the war is not over. They are cognizant of the tasks that lie ahead, especially in the Pacific, but they can also read the dispatches from the front and rejoice in the victories which have come to our arms. To work on the basis of a long war, of course, means that the war will be shortened, but President Roosevelt himself has announced we are winning the Battle of the Atlantic and our air superiority grows by the day.

*

Among the interesting items in Byrnes' speech was his statement that if Italy is knocked completely out of the war and her army surrenders, the enemy will still have more combat divisions in Europe than will the Allies, and will have as many divisions as the Allies will have even after the American mobilization is complete. Then, he added, "only in the air will we have numerical superiority." Even the most earth-bound military man knows now that air superiority even in the face of land superiority by the enemy is highly important, significant and a potent edge. Examples are numerous and that edge in the air which even the conservative Byrnes speech concedes, may be the answer to a lot of questions plaguing the administration.

* * *

And speaking of air power, as who isn't these days, *The Washington Post* has just published the third of a series of open letters on its front page demanding an all-air staff with a chief at its head rating equally with the Navy and Army. The first one was addressed to the President, the second to Secretary Knox and the third to Mr. Roosevelt again. Some insiders in Washington are of the opinion that these editorials—which represent the *Post's* views after long study of the situation—may be inspired by air officers eager for an independent set-up. As was noted in this space three weeks ago, we are closer to a separate air force than we have ever been. Only the final green light remains.

*

When this action will be taken and the details of the plan are providing Washington with one of its best current guessing contests. Most guesses are now that nothing will be done before Congress returns the middle of September. This guessing contest started last spring. Have you made your guess yet?

*

In the midst of endorsements for an independent air set-up from various members of Congress, came an entirely different proposal involving the air arm from Adm. H. E. Yarnell, retired former Commander-in-Chief of the U. S. Asiatic Fleet. He is now back on duty in the office of Adm. Ernest J. King. Adm. Yarnell favors consolidation of the Army, Navy and Air Forces into a single department of war. Writing in the *U. S. Naval Institute Proceedings*, a semi-official publication, he says that "the proposed plan (his) is obviously a radical change in the existing organization. However, it is believed to be far preferable to one of three separate departments which looms in the offing at the present."

New Pratt & Whitneys help engine output.

AVIATION NEWS
August 23, 1943

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Washington Observer

Information on the new Navy fighter, the Hellcat, has been highly restricted and consequently it was of more than passing interest when Grumman referred to Navy schedules for this plane. Most airmen who have seen the ship are highly enthusiastic. The Nips undoubtedly will hear from the Hellcat before the public gets any details. It is comforting to know, however, that this fighter is definitely on the wing and perhaps even now in combat. It looks like another design triumph for Grumman.

★ ★ ★

A secret report on future cargo planes has been made by Grover Loening. At this writing, the report is only for the eyes of WPB Chairman Donald Nelson, WPB Executive Vice-Chairman Charles E. Wilson and a few other top-flight officials. Initial efforts to get a peek at the document were met with a stony silence. It is a subject of considerable interest in view of British complaints that they have no transport planes and are not able to make any Russia, too, would like to get hold of some of our transport planes. That is a situation which will bear watching. It may have widespread repercussions.

★ ★ ★

There are various indications in Washington of a speed-up in post-war thinking. Not that the planners haven't been at work, because they have. But post-war thinking by industry hasn't been very popular in some Administration circles. Leading the way in the speed-up is the consideration being given by officials to contract terminations and renegotiation with a view toward providing a reserve for conversion when the happier days of peace come again.

★ ★ ★

The War Labor Board finally received a pat on the back from President Roosevelt after a long spell of getting nothing from the White House but the absent treatment. Chairman William Davis has made several unsuccessful attempts to gain an audience, particularly while the board was under fire. Davis and other board members were—to make an understatement—not too happy about the situation in which they found themselves. However, with the President's authorization for the induction of war industry strikers and the imposition of strong sanctions against unions or employes failing to comply with WLB orders, Mr. Roosevelt referred to WLB's "remarkable record." This may stop talk of board resignations.

★ ★ ★

Best sources close to the people who keep track of such things say that the total of airframe, engine, propeller, accessories, etc., now amounts to about $1,000,000,000 a month. This figure is even more interesting when compared with conservative estimates that the industry's annual business after the war probably will drop to about $500,000,000.

★ ★ ★

The special committee working on a revitalization program for the Aeronautical Chamber of Commerce will report to the Chamber's Board of Governors at a meeting August 31. While the committee in general agreed on the theme of the reorganization set-up, it was understood that many of the details will be left to the executive head of the trade organization after he is selected. In this connection, at least two prominent national figures have been approached regarding the job. One was interested, but committed. The second was unavailable. The hunt goes on.

★ ★ ★

There are some officials in Washington who are convinced that the labor market among women in some areas still remains large despite the large percentage of women now working in aircraft plants and being hired. A recent survey in Buffalo by the OWI produced a civic program during which 21,000 women not previously employed were persuaded to take war jobs.

★ ★ ★

Here's one of the reasons the aspirin consumption is high in Washington. Workers in West Coast aircraft plants, with wages frozen, have been leaving aircraft for higher pay in other war factories. Workers in other war factories in the East have been leaving for the higher pay in aircraft plants. The result: a manpower shortage somewhere or another, no matter how you look at it.

★ ★ ★

Two reports of special interest to aviation men are in the Office of War Information mill, but probably will not be released for some weeks. One deals with our combat airplanes—the second such report by OWI. The author of the current one is Francis Steegmuller. Steegmuller's aviation background is scanty, but he has an impressive writing background. He prepared the OWI report on the Air Transport Command which was well received. The second report coming up is on the Air Service Command. The job is being done by John Moutoux, a former newspaperman who has completed the Washington ground work on the piece and is now traveling by plane under Air Service Command auspices to their favorite installations.

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Aviation News

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AUGUST 23, 1943

Aircraft Industry Officials Doubt WMC Order Will Solve Problem

Draft boards are urged but not required to follow Washington recommendations; national service act seen likely as last resort.

By SCOTT HERSHEY

Action of the War Manpower Commission designed to encourage the transfer of workers to war industry and to hold necessary workers in war production is another step in the right direction, but most aircraft industry executives do not believe the plan will solve their manpower problem.

▸ **Compulsory Service Possible**—If this latest move does not provide the desired results, and it will take from two to three months to determine whether it will, then a National Service Act sponsored by the Administration is a definite possibility.

▸ **New Plan Voluntary**—It should be noted that the newly announced program is actually only a recommendation to draft boards and that the whole plan is on a voluntary basis. Experts who are studying the manpower situation believe that compulsion is necessary for real action.

▸ **Deferment Priority** — The plan provides a list of super-critical occupations with a No. 1 draft deferment priority, makes additions to the list of non-deferrable activities and occupations, establishes new standards for the transfer of civilian workers from job to job and gives local draft boards a new occupational classification policy.

▸ **West Coast Crisis**—Aircraft plants, particularly on the Pacific Coast, need workers by the thousands. Many West Coast executives see only hundreds as a result of the new program.

▸ **Non-Compulsory Directives** — It should not be overlooked that the draft of fathers is imminent—as of this writing—and the program is timed to get these men into war industry if they don't want to get in the army. Another factor in analyzing the situation is the return of Congress to Washington in mid-September. It is likely they will give legislative force to some non-compulsory directives. Political observers in Washington do not believe Congress will permit the drafting of fathers unless the military situation changes radically.

▸ **Replacement Muddle**—One of the obstacles in the path of the present program is that involved with plant replacement lists. There are many aircraft workers who are now in their second deferment period which expires Dec. 31. Management told the draft boards six months ago that these men were replaceable and has started training replacements. Management will now have to tell draft boards that these men are now more valuable than they were six months ago. Here will arise an administrative friction. The only way to keep critical workers out of the armed services, despite the new plan, is on appeal.

Another question that arises is whether workers who go into aircraft and other war plants within the next few weeks will be considered key or critical workers. This question will be pointed up particularly if the new workers are draft-eligibles otherwise.

▸ **Enough Men Doubted**—Still another consideration, and a most important one, is whether the program will produce the number of men needed. Most observers do not

LOVETT TOURS BELL PLANT: *President Lawrence D. Bell, of Bell Aircraft Corp., shown describing the assembly of the Army's P-39 Airacobra, or its improved version, to Robert A. Lovett, Assistant Secretary of War for Air, during the latter's visit in mid-August. Shown at left is Ray Whitman, Bell vice-president and manager of the Niagara Frontier Division.*

AAF STUDYING VAPOR TRAILS:

The Army Air Forces' Materiel Command at Wright Field reports that the why and wherefore of such vapor trails as these, which give away position to the enemy, are under study by engineers at Dayton. A test pilot at Wright, flying at high altitudes, created these trails, which are the result of exhaust gases condensing

believe it will. The program probably will hold workers on their present jobs to a greater extent than heretofore and that is important.

Hughes to Seek New Speed Record

Lockheed *Constellation* being readied on West Coast for test.

A Lockheed *Constellation* is being readied at the factory at Burbank, Calif., for a new attempt at a transcontinental nonstop record.

▸ **Frye Too** — Howard Hughes, famed for his speed flights, is to be at the controls when the flight is made, probably within a month. The ship will fly Transcontinental and Western Air's colors and Hughes may have Jack Frye, TWA's president, for his first officer.

▸ **8-Hour Goal**—Officials are hoping that the big ship can come east in eight hours to break all established records. Its eastern terminus has not been decided, but since TWA has just inaugurated transcontinental flights into Washington, there is a strong possibility the capital may be its destination.

The plane is one of 40 originally ordered by TWA, which financed the *Constellation's* development. Because of the war, the line's contract was deferred, but the Army gave permission for the speed test flight to be made under TWA's auspices.

Corsair Output Up

Chance Vought exceeds navy schedules four months in row.

Rex B. Beisel, general manager of the Chance Vought Aircraft Division of United Aircraft Corp., has announced production of Vought F4U-1 *Corsair* fighter planes for the Navy has exceeded Navy schedules for four successive months. During those months deliveries increased 119 percent over the previous four months.

▸ **96% Increase**—Beisel added that in the seven months ended July 31 delivery of *Corsairs* were up 96 percent over the previous seven months. He said a new final assembly bay had been added to the plant and that there was an increase in facilities for flight testing. There has been some expansion in the engineering department and the subcontracting system has been broadened.

Ask That Taxes Save Incentive Plan

Armed services urge legislators to make sensible levies on industry.

Backed by the War Production Board, the armed services are urging the framers of new tax legislation to avoid taxes which would nullify existing pay incentive systems in the aircraft and other industries.

▸ **Incentive Destroyer**—They point out that taxes which would eat up incentive payments now in operation and other proposed, would nullify or even destroy an incentive for the fullest possible production.

▸ **Tax Studies**—Army and Navy officials are taking part in current tax studies looking toward the drafting of legislation designed to raise an additional $12,000,000,000 during the year beginning January 1. There are numerous members of Congress who already have expressed their opposition to any bill having that total.

▸ **Morgenthau**—Secretary Morgenthau pointed out that many industries are paying bonuses for increased production and that the armed services are "vitally interested" that the personal income tax shall not be so high "it would interfere with the personal incentive to produce more."

Big Carburetor Gain

Bendix production for July exceeds entire 1940 output.

Production of aircraft carburetors at the midwest plants of Bendix Aviation Corp. in July exceeded the total manufactured in all 1940.

▸ **Injection Type**—Malcolm P. Ferguson, western group vice-president, in announcing the production said the bulk was the injection type, perfected to meet the needs of military aviation in all climates and at varying altitudes.

Goodyear to Remain in Aviation Field

President Litchfield reports aircraft employes exceed rubber workers.

Paul W. Litchfield, president of Goodyear Tire and Rubber Co. has disclosed that Goodyear now has more employees working on aircraft production than on rubber products and that the firm plans to continue its present aircraft manufacturing activities after the war.

▸ **Rubber Crisis Ends** — Litchfield recently completed a six weeks trip starting at West Coast aircraft plants, down through Peru and thence to England. He said the rubber crisis, so far as military demand is concerned, is over.

▸ **Aircraft and Parts** — He pointed out that in addition to Goodyear's activities in the lighter-than-air field, the company makes complete *Corsair* Navy fighters and a large number of parts and subassemblies of other military craft.

Special Manpower Meetings Slated

Wilson hopes 300,000 aircraft workers can be obtained.

In a direct attack on the manpower problem, a series of meetings will be held in Washington within ten days or two weeks with the object of setting up a program which will produce 300,000 new aircraft workers by the end of the year.

The meetings were announced on the West Coast by WPB executive vice-chairman, Charles E. Wilson, who has been touring aircraft plants with other members of the Aircraft Production Board. In Wilson's party were T. P. Wright, head of the Aircraft Resources Control Office, Rear Admiral Ernest M. Pace, Navy Procurement; Brig. Gen. Ben W. Chidlaw, AAF Materiel Command, and Frank Russell, Manager of the National Aircraft War Production Council.

▸ **Enough Workers Assured**—Wilson is determined to meet increasing production schedules and said the Aircraft Production Board will take every step possible to assure the aircraft industry an adequate number of workers and to aid the industry in meeting other obstacles to peak production.

▸ **Necessary Steps**—Despite usual production troubles, the production schedules hang on the manpower issue and Wilson emphasized that the government is ready to take whatever steps are necessary to solve the problem.

The problem involves not only recruiting new workers for the industry but also holding workers on their present jobs, particularly key personnel. Wilson indicated that the complete cooperation of Selective Service was assured in this connection.

Set Post-War Session

Aero Chamber committee to meet next month in Colorado

All phases of the many-sided question concerning the aircraft manufacturing industry's place in the post-war picture will be discussed at a meeting of the Aeronautical Chamber's post-war committee in Colorado Springs, Colo., in late September.

▸ **Voorhes**—This committee, which functions under the Chamber's Economic Development department, is headed by Lockheed's S. W. Voorhes. The committee is planning a three-day session, the first two to be devoted to the aircraft industry and the third day to joint sessions with airline men who have been invited to participate.

Details of the program are now being worked out.

New WTS Contracts Due About Oct. 1

Stewart says quotas are delayed due to induction process.

Training school operators offering the Army enlisted reserve course on Aug. 19 were informed that due to the induction of all WTS students into the active AAF, quotas will not be given to contractors as soon as had been expected.

▸ **Takes Longer**—Induction takes longer than the Army had anticipated, R. McLean Stewart, executive director of WTS, wired the operators, adding that they could expect their contracts on or shortly after Oct. 1. He said arrangements would be made to reimburse the operators for losses resulting from the delay, probably by addition of students above original plans.

Mustang Gets Cannon

With the installation of four 20-mm. cannon, the *Mustang* is capable of destroying small merchant vessels and exploding locomotives, company officials said. Tests disclosed that the added fire power had not decreased the *Mustang's* qualities as a fighter.

Installation of the 20-mm. cannon proved, they said, that big guns could be placed in fighters without causing bumps in wing surfaces.

Winter Test Station

Representatives of United States aircraft manufacturers are expected to be stationed at a new winter experimental station which the Royal Canadian Air Force plans to set up at Kapuskasing, Ontario, a region noted for severe weather.

RCAF personnel with sub zero operational experience will be centered at the station to study cold weather operation of aircraft.

COLD WEATHER TEST:

A six-blade propeller comes to rest after hours of testing under winter conditions at Wright Field. Tests such as this aid AAF Materiel Command engineers in determining effectiveness of various airfoils.

Stratosphere Wind Maker: *These twelve enormous blades of laminated wood will suck a 500-mile-an-hour wind through the new high altitude experimental tunnel being built by the National Advisory Committee for Aeronautics at Cleveland. Conditions in the tunnel will simulate those at 50,000 ft*

Fairchild Shipments Far Ahead of 1942

Deliveries in first half treble those in like period last year.

James S. Ogsbury, president of Fairchild Aviation Corp., reports that shipments in the first half of 1943 were treble those of the same period last year and more than double deliveries for all of 1942.

Net profit for the first six months was reported at $715,384 equal to $2.12 a share of capital stock. This compared with adjusted net income of $579,037 or $1.72 a share for the corresponding period last year.

▸ **Working Capital**—It also was disclosed that Fairchild Aviation Corp. increased its revolving V loan from $5,000,000 to $15,000,0000. Ogsbury said greatly increased volume of business necessitated more capital.

▸ **V Loans**—Consolidated Vultee also figured in the financial picture through a $200,000,000 V loan by 125 banks. The loan will enable the management to refund and consolidate various indebtednesses incurred during the first period of war expansion.

The credit, like other V loans, is available against 90-day notes, and carries interest at three percent of outstanding while the banks get the usual stand-by commission of one percent on the unavailed portion of the credit.

Grumman Record

Deliveries exceed $1,000,000 daily, with peak due next winter.

Grumman Aircraft has announced its production for the Navy now exceeds $1,000,000 a day. Having met and exceeded Navy production schedules, the company will continue to expand its output toward a peak sometime next winter.

▸ **Output Doubled Over '42**—While 1943 deliveries of the new F6F *Hellcat* Navy fighter have not been disclosed, Grumman officials said *Avenger* torpedo planes and other aircraft probably will top $300,000,000, more than double the $143,000,000 recorded for 1942.

General Aircraft Continues Gliders

Company president replies to report of sale to Grand Rapids Industries.

H. J. Maynard, president of General Aircraft Corp., Long Island, N. Y., announces that his firm is in "quantity production of war gliders of the same type (Waco) that recently spanned the Atlantic with cargo," and that the company will continue to build two-control airplanes after the war ends.

▸ **Wrong Report**—Maynard made his statement to dispel a report current in the industry that General has been sold to Grand Rapids Industries. He said the erroneous impression "seems to have gained a wide foothold in the aviation industry."

▸ **True Story**—As he explained it, the company entered into two agreements to sell Grand Rapids Industries several planes, inventories of partially constructed materials, jigs, and the right to make the G1-80 model *Skyfarer*. The non-exclusive use of several patents also was granted in agreements, Maynard said, but the right was reserved to resume output of the model at any time.

Bell Aircraft Plant Chosen for WPB Test

Survey on labor turnover to be conducted by Vice-Chairman Keenan.

The Bell Aircraft plant at Buffalo has been chosen as an experimental plant for a survey to be conducted by WPB on labor turnover from an in-plant angle.

▸ **To Get True Story**—The survey will be under the direction of WPB Vice-Chairman Joseph D. Keenan. The survey was decided upon as the result of requests from industry. Some executives expressed the opinion that they were not getting the real story on turnover from employes and believed that an outside agency, working from the employes' point of view, might be able to get a more accurate picture of the situation which would prove of aid in the manpower situation.

No date has been set for the start of the survey.

New Airport Work

WPB has approved construction work during the week of two CAA airport projects at the request of the Navy Department.

One of the projects at Georgetown, S. C., will cost $613,000 for further development. The other one, at Ft. Worth, Tex., calls for expenditure of $490,000 at Meacham Field for extensions to runways, grading and drainage.

Few Changes in Zero

Assistant chief of Harmon's staff reports on enemy's planes.

Col. Laurence C. Sherman, Assistant Chief of Staff for Lt. Gen. Millard F. Harmon, Commanding General of AAF in the South Pacific, told Washington pressmen last week that the much publicized *Zero* has been changed very little.

The *Zero* may have more armament around the pilot, and has been given increased firepower by extra machine guns, but the Japanese are making few assembly line changes on their principal fighter ship.

▸ **Jap Limitations**—Jap bombers are still limited to the twin engined type. The only four engine craft are used for patrol. Jap bombers can utilize landing strips suitable only for our fighter type craft, but are sturdy as they have been known to carry a light bomb load on a 2,400 mile round trip.

▸ **Deterioration** — However, Col. Sherman again stressed a point made by all airmen returning from the Pacific—that the Jap flyer is no longer the fearless, well trained, aggressive fighter he was at the start of the Solomons campaign.

Canadian Helldiver

The first Curtiss Navy *Helldiver* from the Fort William, Ontario, plant of Canadian Car and Foundry Co., Ltd., has passed its flight tests and full scale production is expected to start shortly. The Canadian company is operating under a U. S. Navy contract. The plane will be entirely Canadian-built except for the engines and some instruments not manufactured in Canada.

Boeing of Canada Opens 5th Plant

Firm builds PBY's and parts for *Anson* and *Noorduyn*.

Boeing Aircraft of Canada, Ltd., of Vancouver, has opened its fifth plant, at Victoria, British Columbia. The plant will manufacture parts for the *Catalina* PBY amphibian.

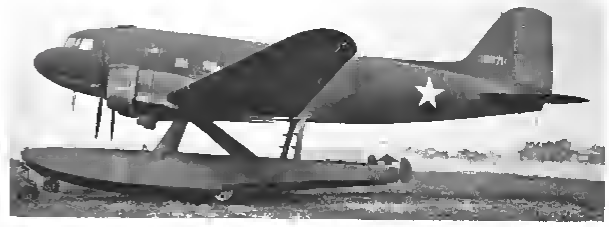
▸ **What Boeing Makes**—Boeing Aircraft of Canada in addition to manufacturing the PBY in its entirety, produces entire tail assemblies, wing spars and other parts for the Avro *Anson*, wing spars for the Noorduyn *Norseman*, and tail pieces for the DeHavilland *Mosquito* bomber.

Previously the firm built Blackburn *Sharks* and parts for the Hawker *Hurricane* and Fairey Battle.

The *Catalina* flying boats are being built under a U. S. Navy contract.

AMPHIBIOUS DOUGLAS:

This Douglas C-47 (DC-3 type) with amphibious floats has been flying around the eastern U. S. paralyzing operations of the volunteer plane watchers corps who can't find such a silhouette in any manual of this or any other nation's planes. Engineers of the AAF Materiel Command are exploring the possibility of making the ship a rescue plane for sea duty. This plane could alight near a Pacific island, taxi to shore, and climb up on land. The floats are 41 ft. long, 5 ft. high, with a maximum width of 5 ft. Rudders help guide the ship in the water. Tests next winter may prove that landings on ice and snow are possible. Is there anything a Douglas can't do?



Wolfe Says Post-War Decade Will See Big Air Traffic Gains

Plane passengers will equal 60 percent of the total first class rail riders, WAL vice-president tells SAE.

Thomas Wolfe, vice-president of Western Air Lines, is confident that the first post-war decade will see the number of air passengers equal 60 percent of the total first class riders which the railroads will be carrying

▸ **To Penetrate Ground Traffic**—In a speech predicting that today's commercial air traffic will expand 40 times in the ten years after the war ends, Wolfe said air commerce could be expected in that period to penetrate ground traffic to the extent of 60 percent of the number of first class rail passengers and 10 percent of second class rail and first class bus passengers, 80 percent of first class mail, 5 percent of rail freight, 65 percent of first class express, 10 percent of second class express, and 5 percent of motor freight

▸ **Small Towns Profitable**—He expressed the belief that a considerable amount of air commerce expansion will result from ability of airlines to reach profitably lightly populated areas of the globe that can not be so reached by railroads costing $70,000 per mile to build and $2,000 per mile for upkeep, or highways costing $100,000 per mile to build and $800 a mile for upkeep

▸ **Post-war Commerce**—Wolfe spoke Friday at the West Coast regional transportation and maintenance meeting of the Society of Automotive Engineers in San Francisco For his paper on *Post War Commercial Aviation*, Wolfe drew on 20 years' experience in the air transport industry and active membership in the West Coast's Air Cargo Research Association, which he organized a year ago

▸ **Pre-War Traffic**—He predicted that of the pre-Pearl Harbor utility type of intercity traffic amounting to 577 billions ton-miles a year, including passengers, the airlines stand a reasonable chance of capturing 4 billion during the post-war ten years

▸ **Rails Can Relax**—But he sided with air transport officials who decry the loosely-expressed belief that air commerce will attempt to drive rail and ocean commerce into oblivion, explaining that "this is less than one percent of the total (of pre-war traffic) and should relax the fears of the 32-billion-dollar railroad industry"

▸ **Bigger Loads**—He challenged the engineers to trim a "51 percent waste" in air cargo door-to-door handling that cuts the flight of domestic air cargoes from a basic airplane cruising speed of 187 mph to 63, including pickup and delivery Wolfe said study of 50,000 shipments involving a million pounds of air cargo indicated that a third more cargo can be handled by intelligent packaging

▸ **Wolfe Predicts**—Other points and predictions by Wolfe

Radical changes in the forms of air traffic by 1955 will see increases on ton-mile basis, of seven times for air mail, eight times for passengers, and 1,000 times for air cargo

▸ **Unborn Traffic**—Anticipation of a 40-times increase in air transportation is conservative and subject to additional increases through "unborn traffic" and international commerce subject to our ability to barter, the outcome of peace table conferences, air rights, and military objectives."

In regard to size of post-war air liners, 1,836 airplanes of between 2 and 12 tons capacity could handle the 4 billion ton-mile post-war business Wolfe forecasts

PCA President Asks Route Planning

Monro says post-war services should be outlined now

In meeting the post-war challenge to provide jobs to returning soldiers trained in aviation, the Nation must guard against air transport monopoly in the foreign field, invasion of the air by surface carriers in domestic transportation, and "destructive, mushroom growths" without adequate federal regulation, says PCA's president, C Bedell Monro

▸ **Controlled Expansion**—In an address before the Junior Board of Commerce of Washington, the head of Pennsylvania-Central Airlines said the challenge can be met, but "an overall but regulated expansion" will be needed "with new routes and new types of services prepared now and held ready to go into effect as our soldiers are demobilized"

TELLING THE WORLD

▸ Grand Rapids Industries, Inc. has launched an illustrated advertising program with the theme of "Skyway to Sicily on Wings by Grand Rapids Craftsmen" Copy is designed to tell the story of 15 furniture plants producing for the aircraft industry by making glider wings, assembling for liaison and trainer planes and making precision wood parts for bombers

▸ A 16-page, three-color booklet entitled *A Quarter Century of Broaching Development* and published by Colonial Broach Co, Detroit, contains an article on broaching aircraft parts. The publication was put out by Colonial this month instead of the regular issue of its house organ *Broaching News* in celebration of the company's twenty-fifth anniversary

▸ A number of aircraft manufacturers fear that it will be necessary to dispense with some of their house organs as a result of the recent paper curtailment Frequency of some already has been cut

▸ Fairchild Engine and Airplane Corp, with a drawing and copy entitled "A New Industry Comes Out of the Woods," is concentrating in its current advertising on the fact that the company is making varied types of planes out of plywood through the use of its patented process, Duramold The modernistic drawing depicts the process involved in bringing plywood from the trees over the blueprints to the finished plane

▸ Cecil & Presbrey, Inc, has been given an account by the Fairchild Engine and Airplane Corp for a series of full-page newspaper advertisements in communities near its three plants Purpose of the program is to acquaint surrounding residents with the contribution to the war effort made by Fairchild employees

▸ Edward F Connelly is the new public relations and advertising director of Switlik Parachute Co He has been associated with the New Jersey Council, the state's promotional and development agency, since its organization in 1937, and has also been publicity director for the New Jersey State Fair

New United Record

Revenue passenger miles flown by United Air Lines in July "shattered all records," that company reports Estimate for the month was 33,625,100, an 8 percent gain over June and 35 percent above July last year September, 1941, was the previous record month, with 32,943,600 revenue passenger miles

* *

Tokyo May See Our Super-Bombers; New U. S. Fighters Ready Soon

***Lightning's* output being doubled, new *Mustang* a terrific climber, improved *Airacobra* ready, *Thunderbolt* at 35,000-ft. is world's fastest, Douglas P-70 night fighter in production.**

AMERICA'S COMBAT PLANES have had sufficient testing in all theaters so that a concentration on the most satisfactory models has become possible.

When war struck, the Boeing B-17 *Flying Fortress* and Curtiss P40 were the only two airplanes we had ready to throw into combat, and both did a magnificent job. The box score of enemy planes shot down against its own losses is not the only criterion of a good airplane but it is one of the best objective tests we have. These two planes are among the very top ones on the list Within a few months most of the others had come into action Changes and improvements, especially in fire-power, came through thick and fast, and a fair balance was struck as between quantity production soon and top-notch quality ultimately. The armed services and the aircraft industry worked out a system of modification centers, and vital battle-tested changes were worked in with a minimum of delay

▸ **Fortress and Liberator Adequate**—Recent indications are that as far as bombers are concerned the European wing of our global war can be taken care of with the vastly improved versions of our *Fortress* and *Liberator* heavy bombers now in action, based in the United Kingdom and the Mediterranean area

The new super-bombers with greatly increased bomb load and range may or may not come into that picture, but they are what the doctor ordered for direct attacks on the Nipponese home grounds

▸ **Dark Horse**—In the fighter class a dark horse at the time of the original entries seems to be setting the pace at the present time In the spring of 1940 the British Purchasing Commission, desperately in need of any combat planes this country could deliver, asked North American Aviation to build P-40's under license from Curtiss.

▸ **Mustang—The Answer**—Their answer was the quickly designed and produced *Mustang* or P-51 with Allison engine, used by the British with great enthusiasm since the spring of 1942 As an Army cooperation scout, ground - strafer, fighter-bomber and medium altitude fighter it took its place among the leading planes of the war It has had the advantage of operating from good airdromes in England and North Africa, and in this respect it is hardly fair to compare it with two other planes in the same class which have turned in outstanding records under highly adverse conditions—cold, steaming jungle and dusty desert, namely the *Airacobra* and *Warhawk*.

▸ **Fastest, Heaviest Armed** — The Army Air Forces have taken delivery of a quantity of P-51's with four 20-mm. cannon, and a special attack-dive bomber version equipped with bomb racks and diving brakes, known as the A-36 As a modified fighter it is the fastest and most heavily armed light dive bomber or low-flying fighter-bomber now in the air Its outstanding success in the invasion of Sicily was one of the features of that entire engagement

▸ **Climbing Power Tests**—Last winter, tests were made with a *Mustang* which had been fitted with the latest version of the Rolls-Royce *Merlin*, the engine which so greatly improved the high altitude performance of the *Spitfire IX* The results of the test were highly satisfactory, particularly in a feature which hitherto had found the United Nations a bit behind in the parade At the sacrifice of other qualities the Germans in their Me-109F and 109G, and Focke-Wulf 190, and the Japs with their Mitsubishi Navy fighter type-00, or *Zero*, produced fighters with an extraordinary rate of static climb, the ability to climb fast almost straight up

▸ **Powered by Packard's "Merlin"**—The new *Mustang* is a big improvement in this respect, and the Packard-built two-stage supercharged *Merlin* engine of 1,500 h p and 4-blade propeller have helped the whole picture—speed, climb and ceiling It is a plane to watch

▸ **Airacobra—New Version** — There are other entries, however The *Airacobra* has done a first-rate job

World's Fastest at High Altitude: *Republic's renowned* Thunderbolt, *P-47, which is described by Navigator, the News' military writer, as the world's fastest plane at 35,000 ft Still further improvements are being made and production is at a new peak*

at the lower levels with the unsupercharged Allison. Recently General Arnold referred to a new version of the *Aracobra* as so vastly improved as to be practically a new airplane. The improved Allison engine with two-stage super (not turbo as in the *Lightning*), 4-blade prop, low-drag wing and elimination of some weight ought to add up to a winning combination. This is another plane to watch, and as General Arnold has said, it is no comfort to the enemy to know that we have so many good fighters coming along. These planes are in production.

▸ **World's Champion**—The Lockheed *Lightning* was a brand new departure, and as such was a long time coming from drawing board to first-line combat. But when it hit the Pacific front late last summer and North Africa a bit later it turned out to be a world's champion. Proved several months before as an outstanding photographic ship at some 35,000 ft (known as F-4 and later F-5), the *Lightning* has been successful as a high altitude fighter. Mechanized assembly lines will have doubled production as between April and September output, according to present schedule, and constant improvements in the plane itself are being made. Keep your eye on the *Lightning*.

▸ **World's Fastest at Extreme Altitude**—Latest of the original team to see action was the Republic *Thunderbolt* P-47. Designed in May 1941, based largely on the P-43 *Lancer*, first turbo-supercharged radial engine powered fighter in the world, first combat reports were received just two years later in action with the 8th Air Force over Europe. At 35,000 ft. and up it is the fastest plane in the world, able to give and take a terrific amount of punishment. It has been successful against the latest version of the Focke-Wulf 190, and also increasingly useful in the fighter sweeps against targets in occupied France, Holland and Belgium.

▸ **Night Fighters** — The P-70 is a specialized night fighter—blacked-out, heavily armed, radar-equipped, very similar to the British version of the same plane, the Douglas DB-7, developed two years ago and called the *Havoc*. Other night fighters, and brand new day fighters are on the way, but we probably won't (and certainly shouldn't) hear much about them until they are in action.

AIR WAR REVIEW: The final link in the aerial bombing ring constricting Nazi-land was welded in the

Production Being Doubled: *The Lockheed Lightning, P-38, whose output is being doubled over a few months' period. It is seeing action in nearly all fronts.*

daylight bombing of Wiener Neustadt in southern Austria, only 27 miles from Vienna. The 9th U. S. Air Force, operating from Middle East bases, sent *Liberators* over the area catching 400 Messerschmitts beside the plant and sprayed destruction on the plant itself.

▸ **Of Things to Come**—Attacks on Berlin and the second bombing of Rome railway yards, this time by the Northwest African Air Force, was another heartening highlight. Other significant moves were the British bombings of northern Italian cities, the smash delivered by MacArthur's heavy bombers against Nip oil refineries at Balikapan in Borneo and the second bombing of Paramushiro in the Kuriles—tip of the Nip home-land. Both the Borneo and Austrian attacks necessitated round-trips of some 2,500 miles—a portent of things to come.

▸ **Sky Knockout Over Sicily**—From Air Vice Marshal Sir Arthur Cunningham came the statement that the German air force "has been knocked out of the skies as far as we are concerned" in discussing the Sicilian campaign, but he warned of bad weather ahead over Europe.

▸ **Nazi Losses and Wastage**—German air losses, he added, have been "astronomical" and while Nazi planes are still good, the personnel of the Luftwaffe appears to have suffered "a complete loss of fighting spirit." Sir Arthur said the crewmen were "not efficient and their wastage of machines is terrific."

He was highly laudatory in his remarks on the American Air Forces, both those under his tactical command and the fleet of *Flying Fortresses* operating in the Strategic Force, under command of Maj. Gen. James H. Doolittle.

▸ **Raid Rome With Safety**—It is reassuring to note that every one of the 500 American planes which participated in the second bombing of Rome returned safely.

▸ **Nazi Inertia**—Veteran airmen of the 9th Air Force have reported finding many good Axis planes unused in Sicily, and saying that the German air forces "either just don't want to fight or else they lack pilots."

▸ **Giant Trooper**—Men of the 12th Air Force have had a good chance to inspect one of the world's biggest "powered glider," a German *Messerburg*, 323, a giant troop carrier. It is a six-engine job, carries an 11-ton load, a company of fully-equipped infantry arranged on several tiers. The plane is said to have a speed of about 160 miles, but cannot get off the ground by itself, requiring a pull by another plane.

▸ **Enemy Deterioration**—In furious air fighting along both ends of the 700-mi. southwest Pacific battle-front, we destroyed 48 Nip planes of all types at a loss of only five.

NAVIGATOR

Box Score

▸ **Losses,** not including accidental losses, since the AAF took over the American Volunteer group in China on July 4, 1942, have been announced by Maj. Gen. Claire L. Chennault of the 14th Air Force: 312 enemy planes lost in the air; 130 enemy planes lost on the ground; 166 enemy planes probably destroyed in the air; 36 U. S. planes lost in the air; 15 U. S. planes lost on the ground.

Government Seeks to Calm Contract Termination Fears

Official pronouncements indicate desire to cooperate with war contractors to prevent losses.

The many-sided problem of war contract termination is being closely studied by the aircraft industry in light of recent government pronouncements which indicate a desire to cooperate to allay the fears of contractors that they might be left holding the bag.

▸ **Proposed Regulations**—Panel discussions have been held by both the East and West Coast groups of the National Aircraft War Production Council. Both groups are familiar with the tentative draft of proposed regulations dealing with contract terminations which has been circulated among interested parties by the War Production Board.

Although an Aug. 15 deadline had been set for the receipt of comment and suggestions on the propsed regulations, it was understood that WPB sent a man to the East Coast Council meeting to receive suggestions direct. The proposed regulations have no official approval, but are being used as a basis for some standard to guide the industry.

▸ **Prompt Reimbursement**—The War Department, through Maj. Gen. C. L. Corbin, director of procurement, Office of the Quartermaster General, has outlined a policy calling for "prompt reimbursement" for any losses incurred through sudden contract termination resulting from a cessation of hostilities.

The basis for determining payments and instructions on procedure under contract cancellations are outlined in a procurement regulation issued by the War Department a few days after Gen. Corbin's statement.

▸ **War Dept. Contracts**—While Gen. Corbin's remarks were directed to WPB's Woolen and Worsted Advisory committee, the fact that they were not immediately released led to the conclusion that the policy involved concerned all War Department contracts and had been deliberated before being announced.

▸ **Safeguards Contractors** — The meeting was closed to the press, but WPB made available a summary of the proceedings. Officials cautioned against interpreting Gen. Corbin's remarks as any prediction of an early end of the war. Rather, they said, they should be regarded as a pledge to contractors that they will not suffer losses on partially completed contracts.

▸ **Post-war Thinking** — Too much post-war thinking among war industries is still highly unpopular in certain government circles, but there are many officials who now realize that post-war planning can be studied without interfering in any way with airplane or other war production.

There have been cases, however, in which contractors have had understandable fears about contract termination which have caused some loss in production.

▸ **Cancellations**—In connection with contract termination, it should be noted that there have been some cancellations of war contracts in Seattle, Los Angeles, San Diego and other areas where the manpower situation is acute. Officials say these cancellations have involved only "less essential" products, and should release workers for aircraft and other critical work.

Tunnel to Speed Engine Research

Cleveland facility may save year in working out "bugs".

The world's first high altitude wind tunnel, now under construction at the Cleveland laboratory of the National Advisory Committee for Aeronautics, is expected to save six months to a year in working the "bugs" out of plane engines and accessories such as superchargers, intercoolers, carburetors and oil coolers designed for high altitude operation.

▸ **Equals Ten Miles Up**—Built to simulate conditions encountered in the rarefied air and low temperatures at 50,000 ft., the new tunnel will permit research work on the ground under stratospheric conditions. It will accommodate engines of up to 4,000 hp.

▸ **500-Mile Cyclone**—Work on the 20-ft. tunnel started this year, and is to be completed before the year's

RYAN EASTERNERS VISIT PLANT:

Ryan Aeronautical Co.'s New York office executives returned to the home plant in San Diego recently to discuss expanded operations of the firm's Exhaust Systems Manufacturing Division. Shown from the left are Fred Bohling, from New York; President T. Claude Ryan; Sales Manager Sam C. Breder, and Orrin Ross, head of the New York Office.

Aircraft Parts from America's New Source of Aluminum

To the aircraft industry, Reynolds means complete Service in Aluminum. Reynolds mines its own bauxite, processes the ore into finished aluminum and then carries the service through to the final vital operation—*fabricated parts for planes.*

Reynolds was the first to produce high grade metal from lean domestic ore and was the first aluminum company to fabricate finished airplane parts.

Now Reynolds is mining more bauxite than was mined in the entire country before the war, converting it into hundreds of millions of pounds of aluminum for aircraft. The Parts Division in Louisville, expanded 40 times, has thousands of workers and batteries of machines on 24-hour schedules.

Scrap from fabricating operations (average 30 percent) stays at Reynolds plants, where it is put right back into production. This eliminates scrap headaches for aircraft manufacturers . . . saves *manpower, plant space, freight facilities . . . and keeps inventories down!*

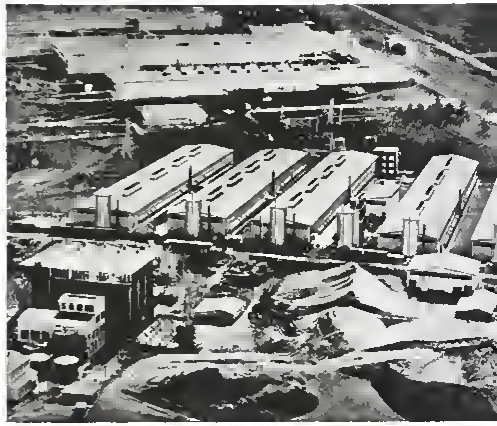
The foresight and courage that created America's New Source of Aluminum has developed the aircraft industry's new source for finished parts. Reynolds Sales Engineers are available throughout the United States.

REYNOLDS METALS COMPANY • PARTS DIVISION • LOUISVILLE • KY.

AMERICA'S NEW SOURCE OF ALUMINUM

INGOT • SHEET • EXTRUSIONS • WIRE • ROD BAR • FORGINGS • TUBING • FOIL • POWDER

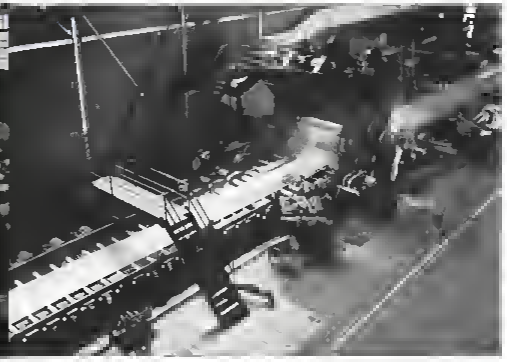
1 Reynolds Aluminum and finished parts start in this Arkansas bauxite mine. Reynolds mines more bauxite than was ever mined in the U. S.



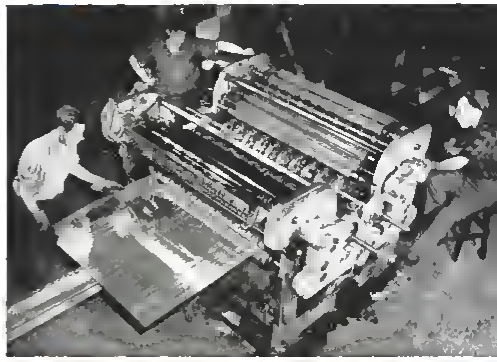
2 Reynolds refines bauxite into alumina; reduces alumina into aluminum; aluminum is cast, alloyed and fabricated into sheet and rod.

3 Aluminum ingots, outside Alabama plant, are fed into remelt furnaces with alloying metals. Resulting alloys are cast into billets.

4 Reynolds rolled aluminum alloy forging stock, tested and inspected, ready to be forged into aircraft propellers.



5 Reynolds huge "4 high" hot mill, rolls billets under tremendous pressure into long ribbons of gleaming aluminum alloy sheets.



6 First automatic stenciling machine in the Aluminum industry, developed by Reynolds, permitting closely printed alloy, gauge and temper lines to insure precise identification.

7 Reynolds Parts Division Shearing Line, capacity 4,000,000 lbs. of sheared skins monthly. All skins Navy inspected.

(No Scrap Problems)

8 Reynolds Router and Stock Drill Department, section of the 250,000 sq. ft. expansion of the Parts Division in Louisville.

(No Scrap Problems)

9 Inspection of finished parts—blanked, formed, heat treated, anodized, zinc chromate primed, ready for aircraft assembly lines.

(No Scrap Problems)

end. Heart of the apparatus will be a huge 12-bladed air screw, 32-ft. in diameter, activated at about 300 rpm. by a 27,000 hp motor. This propeller will be capable of creating a 500-mile-an-hour gale in the closed-circuit tunnel, which when operating will require 52,000 kw of power.

▸ **Intricate Cooling**—The fact that temperature in the tunnel must be kept at 67 deg. below zero—the stratosphere constant—presented an engineering problem complicated by the transformation into heat of the energy of the driving motor and the heat output of the aircraft engine under test. An intricate cooling device, fundamentally the same as that used on commercial air-conditioning, will overcome the difficulty.

The committee's previous work with wind tunnels in its laboratories at Langley Field, Va., and Moffett Field, Calif., stood in good stead on the new structure.

▸ **Laminated Wood Wins** — Since some duralumin wind propellers of such large size have been found unsatisfactory after they were cast, it was decided to make the fan for the high altitude tunnel of laminated wood. It was built at Langley Field, and assembled in the committee's hangar at Cleveland.

(See photograph on page 10.)

Industry Reports Gain in Planes For First Half of August

Shortage of highest horsepower engines appearing as latest in parade of problems plaguing airframe manufacturers.

Despite the manpower crisis and despite the ever-present pressure for more and more production, the output of airplanes for the first part of August was considerably above that for the same period in July.

▸ **Output Up**—The increase, while impressive, must be considered in the light of a production lag during the first part of July which was overcome and made up during the latter part of the month. At the same time, the fact that the aircraft industry was able to register a gain at all cannot be overlooked.

▸ **New Headache**—One of the main problems which has arisen now to plague the industry, in addition to its manpower headache, is aircraft engine production. It is definitely off. This is true mainly of new, increased horsepower engines. Fortunately, it is a situation not without remedy.

▸ **Stumbling Blocks**—There are several reasons assigned for this lag, but most of them get back to the Truman Committee report and subsequent indictments. Nobody likes to go to court, particularly at a period when time is so valuable and when company key men are needed at their posts. Sharpest cuts in engine production were reported from the plant most severely criticized in the report. This was due in part to drastic changes in inspection procedure and in part to employe morale which naturally was not increased by the publication of the Truman investigation.

▸ **Checks and Double-Checks**—Engine and other manufacturers who were convinced their inspection methods were fool-proof are now worried. They are making not only the usual careful checks and double-checks, but in order to avoid criticism and possible indictment there were and are triple checks, in most cases unnecessary. This runs down through subcontractors who supply vital parts for engines and other equipment.

▸ **Truman Changes System** — The drastic changes in inspection procedure which followed publication of the Truman report takes more work and more time and in the opinion of many industry executives produces no better results. The industry simply cannot afford to take the risk of prosecution, even though it is convinced its inspection methods are as near perfection as possible.

▸ **Plane Pool**—The effect of the lag in engine production probably will not be felt immediately so far as unit output is concerned. There is a sizeable pool of accepted airplanes which are undelivered. The number of airplanes in this pool varies somewhat from month to month but the average remains fairly high.

▸ **Manpower Main Problem** — The problem of production generally, however, is still manpower and that problem is being attacked from all sides with indications that help may be on the way. Whether the help will be enough remains to be seen. The industry has shown its willingness to participate in any sort of program which will keep the production up where everybody would like to see it. Incentive payments, draft deferments, War Manpower Commission orders and plans yet unborn will all play their part.

▸ **Needs Thousands, Gets Hundreds** —Various plant surveys of the number of workers available in their areas lead rather to the conclusion that the plan probably will produce hundreds where thousands are needed. One expert cited Boeing's immediate need for 9,000 workers and estimated the new set-up would provide the company with less than 1,000.

CHILEANS INSPECT RYAN PLANT:

On a national tour of aircraft factories before taking up duties as Chilean air aide in Washington, Group Commander Raul Gonzales Nolle, chief of the Chilean air commission (second from left) inspected the plant of Ryan Aeronautical Co., with Capt. Pedro Loyer (fourth from left) of the Chilean navy. Also shown are Jack Wiseman (left), Ryan's Washington representative, Lieut. R. A. Burbick, USN, Lieut. S. H. Zeigler, resident Navy inspector at Ryan, and Robert Chase, Ryan sales executive.

▸ **Fathers vs. Workers**—War Manpower officials hopefully promulgated the program to stimulate production and most certainly the plan will have a major effect in deciding which fathers and which workers will be inducted first. The effect on production is still problematical in the opinion of most observers.

Administration critics saw the program as a make-shift and confusing and asked for a definite policy which would assure the placement of workers where most needed and to prevent migration of workers employed on essential wartime jobs.

Boeing Wins Award For Trainer Output

Wichita plant tops nation for plane deliveries per employee.

The Wichita plant of the Boeing Airplane Company, makers of the *Kaydet*, primary trainer, now holds first place among the nation's 42 plane-making facilities on the basis of completed units and spare parts per employee deliveries to the armed services.

J. E. Schaefer, Boeing vice-president, said output in relation to factory area also was a factor in determining the production record.

AAF's Materiel Command compiles operating ratios for the aircraft industry, using May as an average.

▸ **Kaydet Trainer**—More Army and Navy cadets earn their wings on the *Kaydet* than any other primary trainer, according to Shaefer. The 7,000th *Kaydet* was delivered in April.

The Boeing factory at Seattle, home of the *Flying Fortress*, recently was adjudged the nation's top producer on the basis of pounds of aircraft in relation to floor space, say management officials.

"WORLD'S FASTEST LINE"

Consolidated Vultee Aircraft calls its Downey, Calif., basic trainer final assembly line the fastest in the world. Eleven planes (BT-15) nearing completion, "just part of a day's production," are shown on this portion of the long powered conveyor line described as the Army and Navy's major source of such planes. The planes move through the plant tail first.

3 WPB Groups Studying Pacific Coast Manpower Problem

Wilson and Aircraft Production Board leads delegation, with Lombard and Biemiller on other projects.

By MARY PAULINE PERRY

Three separate studies by government production officials were made during the week on the West Coast's aircraft manpower problems.

Charles E. Wilson and members of his Aircraft Production Board were to return this week-end from a Pacific Coast trip. Wilson discussed two plans with members of the West Coast Aircraft War Production Council designed to alleviate the severe manpower shortage on the coast which is hampering production.

▸ **Two Better Than Three**—Wilson hopes to convince management and workers alike that two 10-hr. shifts would work more advantageously than three 8-hr. shifts where plant and community facilities were available. He is also interested in pay incentive and is said in Washington to have told Treasury officials that he was much more interested in increasing production by any means than in "holding-the-line" against inflation. He believes that workers could earn up to 30 percent more by increasing production to that rate.

▸ **APB Members on Tour**—Accompanying Wilson on his trip were T. P. Wright, director of ARCO; Rear Adm. E. M. Pace, Jr., Navy member, and Brig. Gen. Ben Chidlaw, chief of Materiel Division, assistant chief of Air Staff for Materiel, Maintenance and Distribution, representing Maj. Gen. O. P. Echols. Lt. Gen. William S. Knudsen, War Department Production, and Under-Secretary of War Robert Patterson joined the Board in Los Angeles on Monday.

▸ **Parts Shortage Solution**—Working on an additional plan to keep the airplanes flowing rapidly and regularly off the assembly line was Dr. A. E. Lombard, Jr., Chief, Manpower Division of ARCO. Dr. Lombard was tackling the problem from the point of view of the aluminum plants where labor is so scarce that aircraft manufacture may be held up due to lack of fabricated parts from aluminum. Dr. Lombard is working with the aircraft manufacturers to release some of their workers who live near the large West Coast aluminum plants in order to assure production.

▸ **Workers' Problem Studied**—Andrew Biemiller, special assistant to Joseph D. Keenan, WPB vice-chairman for labor, is also in Los Angeles seeking a solution to the problem from community facilities difficulties. Biemiller, who will remain several weeks in Los Angeles, planned to consult with Wilson on the plans to facilitate transportation, housing, child care, shopping, entertainment for the war workers in the crowded Los Angeles region.

▸ **Aircraft Agency Changes**—Meanwhile in Washington changes were taking place in one of the three aircraft branches left in the board and all three branches were being screened so their jobs could be more definitely setup. Since the resignation of W. L. Jack Nelson as chief of the Aircraft Priorities Branch, Alfred W. Lewis has been appointed chief. Mr. Lewis was formerly chief of Aircraft Rating Section in the branch. Paul Haynes will now administer Order L-262, which allows rental, sale or transfer of planes 500 hp or less; and Eustice W. Ruddick will administer the revised P-47 which allocates parts for small planes and facilities.

New Plane De-Icer

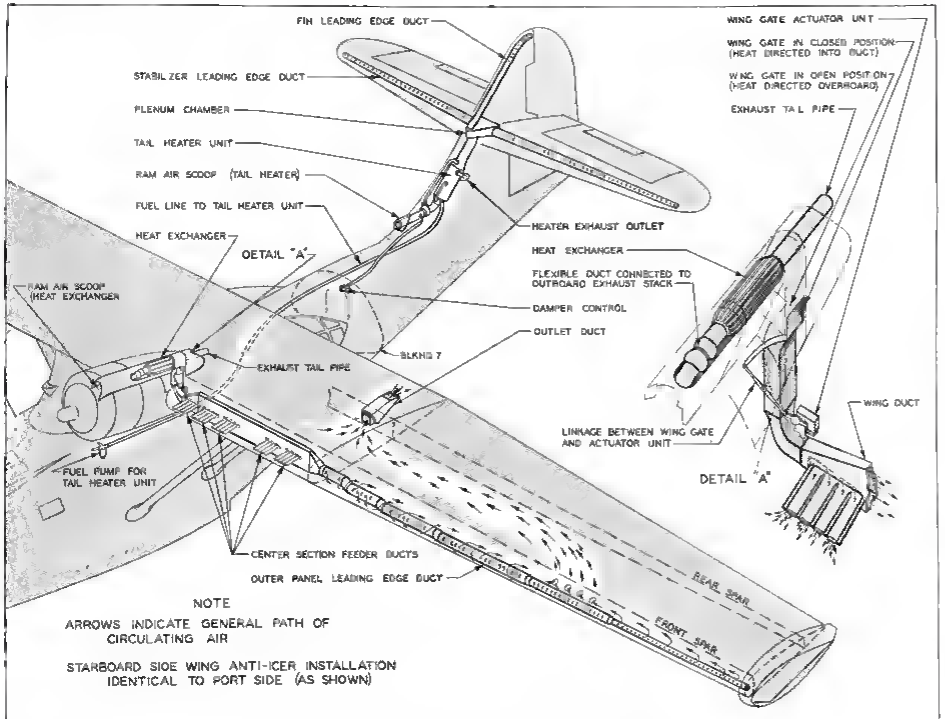
NACA theory developed by Consolidated Vultee Corp.

Enthusiastic officials of Consolidated Vultee Aircraft Corp. have announced practical application of an old idea—the use of engine heat to de-ice planes.

Thus far the system, which distributes air heated by exhaust pipes inside wings and through ducts to tail surfaces and plane interior, has been used only in Consolidated planes. It will become available automatically, however, to all plane manufacturers with war contracts.

▸ **Girdler Reveals** — Tom Girdler, chairman of Consolidated Vultee's board, disclosed that the device was installed months ago in the PBY-5, the Consolidated *Catalina* long-range patrol bomber. It is to be included soon in the B-24 *Liberator* bomber, the PB2Y-3 *Coronado* bomber, and the new P4Y-1, new Navy flying patrol boat being built at New Orleans.

Theory of the system was advanced six years ago by the National Advisory Committee for Aeronautics. Work in its development was done by Lewis A. Rodert, senior engineer of NACA, with assistance by Howard F. Schmidt, Consolidated Vultee engineer.



HEAT ANTI-ICER SYSTEMS

TRANSPORT

★ ★

U.S. Agencies Pledge Airlines About 24 More Planes This Year

Chances bright for additional equipment next year, Washington officials tell transport representatives.

By MERLIN MICKEL

The Post Office Department disclosed last week that enough planes would be returned to the commercial airlines from the armed services by the end of this year to meet the growing strain on the air mail service. This move would probably remove the threat of a mail priority system.

Although the Post Office withheld further comment, and the Civil Aeronautics Board and Army had nothing to say, a few authentic disclosures emerged from other sources.

Probably half a dozen planes, in addition to the eight already returned to the airlines, will be turned back by the end of August. About 18 more may be expected to become available for commercial operation before this year ends.

▸ **Invasion Takes All**—While the availability of planes admittedly hinged on changing conditions, and a temporary delay might occur because of war demands, there was no doubt that these were the plans as of last week. On the other side of the picture, rumors were current that imminent invasion plans by the Army were requiring full use of all available transports, including former airlines planes, to carry men and material. The likelihood that anything beyond unexpected war developments would prevent return of the planes, however, was discounted.

▸ **Full Restoration End of '44**—On prospects for next year, it appears almost a certainty that the airlines will receive back during 1944 as many, if not more, planes than the Army took from them for war purposes. In some Army quarters there is conjecture that more planes will be made available, while in others it is said that the lines will be restored to their previous equipment status well before the end of next year.

▸ **Over-Burdened**—In April, 1942, the lines were flying about 324 planes. In April, 1943, the figure was 165. The airlines have been crying their hearts out for more planes, since only eight have come back. Several of these were Lockheeds. Operating at heavily-increased war tempo, they are utilizing their resources to the utmost to carry extra burdens of mail, express and passenger traffic.

▸ **Irreducible Minimum**—Although officially still under wraps, a memorandum was written to the Secretary of War by the President on May 6, 1942, stating that the Army, which had taken about half the Nation's commercial transport planes for war uses, must leave the airlines a minimum of at least 165 at all times. This figure was said to include 150 DC3's, 10 Lockheed Lodestars, and five other planes. All Douglas sleeper transports were converted into cargo ships.

For a while it appeared unlikely that the first half dozen planes turned back after the date of the memorandum would be followed by others for some time to come, a feeling found in the Post Office Department and certain Civil Aeronautics Board quarters as well as among the airlines themselves.

▸ **Interruptian**—Meanwhile, the priorities system has bitten into regular travel, forcing countless interruptions of passenger trips and express and mail shipments, many of them of prime importance.

Until plane production reached its present rate, these conditions were accepted as simply one of the exigencies of war, for which remedy would be found as speedily as possible. Now, however, the airlines are finding it increasingly difficult to understand why more planes have not come back.

▸ **Turn-Downs & Pull-Offs**—While the lines fretted about turn-downs even of priority passengers and express and mail pull-offs, the Post Office Department has been especially concerned about the mail.

▸ **Mail Versus Passengers**—Until January of this year, mail was handled without too much trouble, but about that time the squeeze began, and the Department saw mail taken from planes time after time to permit passage of priority passengers, despite increases in permitted load figure on commercial transports.

Now the Post Office believes that the number of planes to be returned through the remainder of this year may be sufficient to handle expeditiously all air mail on the basis of its *present* volume. That volume is continuing to increase, however, and there are indications that restoration of planes to the commercial lines must continue if they are to keep pace with it.

Airlines' Revenue Up 132% in Year

Civil Aeronautics Board reports that for the year ended May 31 net operating revenue for all domestic airlines was 131.9 percent higher than for the twelve months ending a year earlier. (*Cntd. on next page*)

VETERAN BOEING IN NEW SECRET WAR ROLE:

This Boeing 247D, long a research unit for United Air Lines, is now doing important new secret work as a flying laboratory for the War Department. It is the only Boeing United retains of 60 acquired about 1933. Like the 21-passenger Douglas DC-3 of today, the 10-passenger Boeing was once the standard airliner of the U. S.

The year to May 31, 1943, showed a net of $31,020,000, while the figure for the year ending May 31, 1942, was $13,377,100. The increase occurred despite the fact the airlines received $894,400 less mail revenue.

▸ **Express and Freight**—Express and freight revenues reflected the greatest increase, rising from $3,992,600 for the year ending May 31, 1942, to $8,357,600 for the next twelve months, a boost of 109 percent.

▸ **Revenue Miles**—Revenue miles flown dropped to 96,940,200, however, for the year ending last May, from 139,190,400 for the twelve months preceding. Passenger revenue was off from $77,547,800 for the year ending May, 1942, to $76,315,100, a drop of only 1.6 percent despite the 30.4 percent decrease in miles flown in the later period.

▸ **Expenses Down**—With the express and freight increase, total operating revenues were up 2.5 percent, from $108,079,600 to $110,825,600. Operating expenses, on the other hand, dropped 15.7 percent, from $94,702,500 to $79,805,600.

CAB's report showed that the ratio of revenues to expenses for the year ending last May 31 was 138.9 percent, where for the year ending May 31, 1942, it was 114.1 percent.

The report also showed that net operating revenue in May for the 18 domestic carriers, including All American Aviation, Inc., and Hawaiian Airlines, Inc., reached a total of $2,788,500, an increase of 21 percent over the $2,301,800 in May, 1942.

TWA and United Start Capital Lines

Christening ceremony and early breakfast mark inauguration of service.

One of the major airline expansions in the East since the war began was noted with fanfare last Monday when Transcontinental and Western Air and United Air Lines planes landed at Washington National Airport to inaugurate the linking of the capital with two more transcontinental lines.

▸ **Sunrise Celebration**—TWA's first plane sat down at 5:37 a.m., when the sun was only a quarter hour high. A little less than nine hours later, at 2:22 p.m., United's first ship arrived. Despite the early hour, TWA celebrated with a sunrise breakfast in the airport's Terrace Room. John Groves, airport manager, was host, and a score of radio and press representatives and company officials were guests.

▸ **Inaugural Plane**—A larger celebration occurred in the afternoon, when about 1,000 were present to watch Mrs. Jimmy Doolittle, wife of the AAF's famed major general, christen United's inaugural plane "City of Washington, D. C." She was introduced by L. Welch Pogue, chairman of the Civil Aeronautics Board, which approved the expansion last June.

▸ **Air-Travel Producer** — Pointing out that since 1939 Washington has produced more air-passenger traffic than any other municipality except New York and Chicago, Pogue said that "the public interest—compelling as it always is—spoke here and called for still more of the great advantages of transcontinental air service for our nation's headquarters. United Air Lines and TWA are to supply the additional coast-to-coast one-carrier service to our nation's capital."

▸ **Cross-Country Lines**—Both TWA and United came in loaded. Each will fly two round trips in and out of the capital daily, United reaching its cross-country line at Toledo and TWA at Dayton.

New Route Requests Slacken at CAB

Docket section reports dullest week of the summer.

Dog days apparently struck route applicants last week, and the lightest filing since the summer started was received in the Civil Aeronautics Board docket section. One worker there was hopeful that "maybe all the applications are in."

▸ **Ambitious**—Most ambitious in the group was that by Pennsylvania-Central Airlines, which proposes to link Washington, its main terminal, with New York and Boston, and thence to a group of cities in the Eastern and New England area, extending its operations into four additional states and 22 cities.

This and other applications were as follows:

▸ **Pennsylvania - Central Airlines Corp.**, Washington National Airport. Scheduled air transportation, persons, property and mail, from Washington and Baltimore (already on schedule) to New York via Wilmington, Philadelphia, Trenton, Newark. From New York, a direct line to Boston, and two routes via intermediate points, one through Bridgeport, New Haven, New London, New Bedford, Fall River, Providence, Attleboro, Taunton, Brockton; the other through New Britain, Waterbury, Meriden, Bristol, Hartford, Springfield and Worcester.

▸ **Arthur J. Heiser**, Floral Park, Long Island. Scheduled air transportation, persons, property and mail by helicopter between New York City and Montauk Point, L. I., via intermediate points.

▸ **A petition was received** from the two Florida communities of Sarasota and Bradenton to change designation of Sarasota on National Air Lines' Route 31 to Sarasota-Bradenton, and make a similar change in the name of the Sarasota Airport.

▸ **Transcontinental and Western Air, Inc.**, amended an old application to include Providence, R. I., as one of intermediate points it would serve on a New York-Boston route.

▸ **Denco Bus Lines, Inc.**, Ada, Okla. Scheduled and non-scheduled transportation, pasengers, mail and property by helicopter, glider or other types of aircraft, four routes via intermediate points, totaling 1,428 miles: Tulsa, Okla., to Roswell, N. M.; Oklahoma City, Okla., to Little Rock, Ark.; Oklahoma City to Hot Springs, Ark., Tulsa to Hot Springs.

United and TWA Expand: *Ceremonies at Washington National Airport marked the inauguration of service Aug. 16 into the capital by United Air Lines and Transcontinental and Western Air. The picture shows the speakers stand and crowd at the Administration Building as United's first flight was celebrated.*

New KLM Service

KLM Royal Dutch Air Lines has started service from Miami over the Caribbean, on twice-weekly flights to Curacao, Netherlands West Indies.

▸ **Booked Up**—Planes will fly alternately over two routes, one by Kingston, Jamaica, and the other by Port Au Prince, Haiti. The line is operating under a six-months' permit by the Civil Aeronautics Board, with provisions for semi-annual renewals until six months after the war. Traffic officials announced all flights on the new route have been booked solidly through September.

American Begins All-Cargo Trips

Transcontinental round trip daily starts with DC-3's.

Scheduled transcontinental all-cargo flights were started last week by American Airlines DC-3's, equipped with special containers to convert seats into cargo space. Shipment of mail is expected to be facilitated, making more space and weight available for other flights.

▸ **Capacity Loads**—American announced it had scheduled flights daily between New York and Los Angeles, with stops at Washington, Nashville, Memphis, Dallas, Fort Worth, El Paso and Phoenix, for mail and express only. More flexible operation of the line's equipment, it was explained, will result in a higher percentage of capacity loads on both passenger and cargo runs.

PAA Owns Mexican Line, Examiner Says

CAB aide recommends Board issue a decision.

Recommendation that the Civil Aeronautics Board find that Pan American Airways has acquired control of Aeronaves de Mexico, S. A., has been made to the board by Examiner J. Francis Reilly.

His report also recommended that the board hold public hearings to determine whether the acquisition fulfills requirements of the Civil Aeronautics Act.

PAA had requested that the board determine whether its acquisition of a 40 percent stock interest in Aeronaves was subject to the board's approval, and that approval be granted if such be the case.

Reilly found that by virtue of having two employees on Aeronaves' board of directors and its stock interest, Pan American could defeat any resolution before Aeronaves stockholders.

A.W. Douglas to ATA

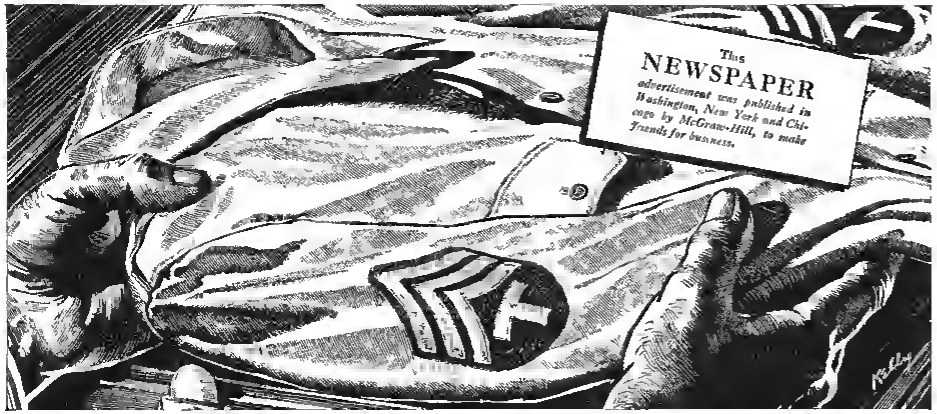
Leaves Fleetwings to take engineering and maintenance post.

Allen W. Douglas, widely known aeronautical engineer, will join the Air Transport Association Sept. 1 as engineering and maintenance liaison man between the association and the military in the airlines' war job.

Douglas' selection, unanimously approved by ATA members and Col. Edgar S. Gorrell, ATA president, was announced at a recent meeting of airline engineers.

▸ **Teams With Groves**—As secretary of the association's Engineering and Maintenance Committees and subcommittees, Douglas will work closely with John Groves, who also joins ATA Sept. 1 as operations division manager. Groves now is manager of Washington National Airport.

Douglas goes to the association from Fleetwings, Inc., Bristol, Pa.



When the Stripes are in the Attic . . .
A NEW BATTLE WILL BEGIN

Sound Democracy is Based on Public Understanding

The purpose of this advertisement—and of the messages which have preceded it in newspapers in New York, Chicago, and Washington—is to build a better understanding of the importance of Industrial Progress.

America was built on industrial progress. Victory for our armies would be impossible without our unparalleled industrial strength. Our post-war future will be shaped by it. But to maintain this industrial strength we must have the intelligent cooperation of every citizen.

In a democracy, where all have a voice, all must understand.

Fortunately, we have all the facilities with which to accomplish this educational job. American businesses, large and small, can do their share. Through their local press and other means they can educate the people in their own communities to an understanding of the inescapable fact that we cannot hope to solve our Home Front Problems—now or post-war—unless the productivity of each and every American is increased.

It is our hope that this McGraw-Hill Campaign will contribute to this understanding and provide the "educational yeast" for others, so that every industrial community can receive essential insight into the part that a sound industry can play in assuring good living.

Free newspaper mats of this and other advertisements of the Campaign are available to those businesses who lack facilities for telling their own story in their local press. Space is provided, in these mats, for the signature of the local sponsor.

James H. McGraw, Jr.
President
McGraw-Hill Publishing Company, Inc.

WE were thinking about a soldier named Tim the other day . . . but not in a sticky, sentimental sort of a way.

We were just thinking about the office boy who'll come home a trained technician.

You see, we'll owe Tim a job when he gets back. But how the heck are we going to fit a man who has kept a Flying Fortress in fighting trim back into the minuscule responsibilities of sealing letters and running errands?

Obviously, we've got to figure out a wider scope for a Tim who has learned a great deal, not only about machines, but about people.

And how about the girl who has Tim's old job? She is doing all right. Maybe she will get married and quit work when the war is over . . . but then again?

See how our thoughts were running? Two jobs to provide where only one job existed.

► If you run a business, or a department, you know the next step in our thinking by heart. Multiply Tim by the number of employees that are in the services, or in government jobs, and add the new people that now have their old jobs, and you will see that this nation faces the greatest opportunity in the history of the world.

If we live up to that opportunity, we will not have 10,000,000 unemployed, with their wonderful training going to waste. Instead we will have a country humming with the released energy of its whole people.

FREE MATS: If you would like to publish this message over your own company name, or distribute it in handy booklet form, write or wire Research Dept., McGraw-Hill Publishing Co., Inc., 330 West 42nd St., New York (19), N.Y.

When the Stripes are in the Attic . . . A NEW BATTLE WILL BEGIN (cont'd)

What are we going to do about providing 10,000,000 new jobs when the uniforms are in the attic?

That will be the peacetime battle, and thousands of civilians are now planning its strategy and tactics.

Fortunately, there is a better way to use the energy and skill of our fighters and war workers than putting them on ambition-killing government jobs in some super W. P. A.

American Industry is the best outlet for personal energy and skill.

If you doubt that, remember that our modern industry is little more than 50 years old.

In that short time it has provided more good living for more people than all the centuries and milleniums that went before.

American Industry can give good jobs to every skilled and energetic person who wants to work.

How? By extending the process that produced so much good living for so many in the years gone by.

► If that is true, then everybody should understand how industry works, so that the growth of industry can be encouraged.

The purpose of industry is to get more work done in less time.

The life of industry is improvement.

When products are constantly improved (either in appearance, service or price) more and more people buy them. That makes jobs.

When there is no industrial improvement, you have a country with living standards like those in China, or India.

When there is slow industrial improvement, you have a country like, say, one of the Balkan states.

When there is rapid industrial improvement, you have a country like ours, with the highest living standards in the world.

We haven't always understood this, and so we have had periods when there was little new machinery and improvement in plant. That helps cause depressions.

But, remember that the plants which made electric refrigerators, radios, air conditioning and streamlined trains supplied good jobs during the last depression, because those were *improved* products which people bought in spite of hard times.

► We don't need to worry about creating 10 million new jobs, if we give our nation of Eli Whitneys a chance to do their stuff.

Why do we say "give them a chance"?

Because the only chance industry has to improve is through its Seed Money.

As you know, Seed Money is that part of profit which is "ploughed back" into a business in improved factories, machines, methods and products.

As you also know, a very great amount of Seed Money is being taxed out of existence.

We don't think it makes much sense to stunt the growth of industry at a time when 10 million new jobs will be needed, do you?

If you think Congress should look into this matter of providing better conditions for industrial growth, tell your Congressman how you feel.

"Industrial Progress is the Source of all Good Living."

THE McGRAW-HILL NETWORK OF INDUSTRIAL COMMUNICATION

24 publications, which gather "war-news" from the "war-production-front" through a staff of more than 153 editors and 725 engineer-correspondents . . . More than 1,500,000 executives, designers, production men and distributors use the editorial and advertising pages of these magazines to exchange ideas on war-production problems.

McGRAW-HILL BOOKS

Publishers of technical, engineering and business books for colleges, schools, and for business and industrial use.

This advertisement is available in handy booklet form. (Less than 100 copies free. Larger quantities, $1.00 per 100, $10.00 per 1000.)

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Business Publishers International Corporation an affiliate, publishers of Business and Technical Magazines for Latin America, and Overseas Circulation

THE NEWS VIEWS—

J. H. Kindelberger

J. H. Kindelberger is known far and wide and to high and low in aviation as Dutch. That is a tip-off on the success of this man who formally is president and managing director of North American Aviation, Inc. He hasn't taken a regular vacation in 20 years.

The J. H. stands for James Howard and he was born in Wheeling, West Virginia in 1895. There was work in Wheeling, a tour with the Army Engineers, a session at Carnegie Institute of Technology (he left to get into the other war, eventually the Air Corps, of course). Then, after the armistice, work as a draftsman at The Glenn L. Martin plant, Cleveland. He became chief draftsman and assistant chief engineer under Donald Douglas, then chief engineer for Martin.

Douglas formed his own company and Kindelberger went to Los Angeles as Douglas' chief engineer, and ultimately vice-president in charge of engineering. After nine years with Douglas, Dutch accepted an invitation to become president of General Aviation Mfg. Corp. in Baltimore. In January, 1935, General Aviation was erased from the books and J. H. Kindelberger became president and managing director of North American. In 1930 there was only one relatively small plant. That plant is now one of the largest industrial establishments of its kind and there are two new plants, one in Texas, another in Kansas, each larger than the home plant.

Dutch is proud of the production of North American's famous *Mustang* and other warplanes. He is just as proud of the fact that as he walks through his plant he sees many men who started with him at the bottom now holding responsible positions with the company.

PERSONNEL

* *

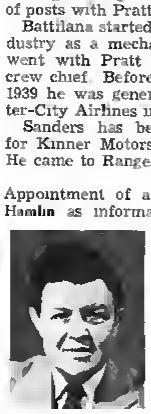
Three executives have been promoted at the Ranger Engines Division of the Fairchild Engine and Airplane Corp. **Everard M. Lester**, assistant chief engineer, was made assistant general manager and was succeeded by **C. P. Sanders**, formerly development engineer. **Paul Battilana** was promoted from service manager to assistant manager of contracts.

Lester, who came to Ranger as assistant chief engineer in 1941, has received degrees from Massachusetts Institute of Technology, was commissioned a second lieutenant in the Air Corps Reserve upon graduation from the Army Air Corps' school at San Antonio, and returned to MIT as a Hayden Fellow in Business. Before coming to Ranger he held a succession of posts with Pratt and Whitney.

Battilana started in the aviation industry as a mechanic's helper, later went with Pratt and Whitney as a crew chief. Before joining Ranger in 1939 he was general manager of Inter-City Airlines in Boston.

Sanders has been chief engineer for Kinner Motors and for Menasco. He came to Ranger in January.

Appointment of a successor to **Fred Hamlin** as information and statistics director of the Civil Aeronautics Administration was delayed by the death, Aug. 16, of **Roscoe Wright**, 43 (photo). Before his death, the result of a heart attack, Mr. Wright had been reappointed to the information job which he was forced to vacate in 1941 due to ill health.



Wright was a pioneer flyer. For 25 years he was engaged in the newspaper and public relations work. He took over his post at CAA in 1940.

During Wright's illness, Hamlin was director of information and statistics. He resigned to join the Ziff-Davis Publishing Co., planning to leave August 28 and assume his new duties October 1. A graduate of the University of Pittsburgh, Hamlin had wide press experience in New York before he went to CAA to fill one of the most important press jobs in the aviation field.

Rear Admiral A. B. Cook, chief of Naval Air Operational Training for the past 15 months, has been promoted to vice-admiral and transferred to San Juan, Puerto Rico, as commandant of the Tenth Naval District and commander of the Caribbean Sea frontier. No successor to Adm. Cook has been named but **Capt. Arthur Gavin**, recently made commandant of the Jacksonville, Fla., Naval Air Station, will be acting chief of naval air operational training.

Lieut. Col. D. R. Petty, one-time assistant superintendent of flying for United Air Lines at Chicago and recently United's superintendent of flight operations at Denver, piloted the first transport plane to unload paratroopers over Sicily. Petty went on military leave from his position as superintendent of flight operations in March, 1942, and went overseas last May as executive officer of a troop-carrier command.

Brig. Gen. Howard A. Craig has been appointed assistant chief of the Air Staff for Operations, Commitments and Requirements, succeeding **Maj. Gen. Barney M. Giles**, who was promoted to chief. Craig previously was chief of staff for the Mediterranean Air Command under Air Chief Marshal Sir Arthur W. Tedder. He has also been assistant chief of staff (plans) of the Army Air Forces.

Glenn A. Wise has been transferred to Washington from Philadelphia to handle TWA's recently inaugurated operations from the Washington National Airport. Chief passenger agent is Francis Schultz, operations agent, H. W. Sigmund. James T. Campbell, New York, will be chief radio operator with headquarters at Gravelly Point.

C. Hart Miller, vice-president of Republic Aviation Corp., has been appointed divisional manager of the company's Farmingdale plant. He relinquished his post as director of the Military Contracts Department, to

which position **Don M. Parker**, assistant director, was promoted.

Miller, graduate of the University of Kentucky and the aeronautical engineering course at New York University, was an Army flier before coming to Republic in 1935 as a test pilot.

Parker, who has been in the aviation industry 16 years, came to Republic three years ago after having been associated with Sikorsky and Wright Aeronautical as a sales and advertising executive.

Russell E. Dill and **S. D. Hackley** have been promoted to chief administrative manager and chief operations manager, respectively, of Fleetwings Division of Kaiser Cargo, Inc. Dill was with the East Coast division, Hackley, with the West Coast division. **Frank De Ganahl**, former vice-president and general manager has resigned because of ill health and the resignation of **W. F. Jacobs**, former factory manager, also has been announced. Fleetwings manufactures aircraft parts for a number of Army and Navy combat aircraft and also has underway several experimental military aircraft projects.

W. A. Smith, former district traffic manager for Transcontinental & Western Air, Inc., at Honolulu, temporarily assigned after Pearl Harbor to the Los Angeles area, has been appointed traffic manager at San Diego. Smith had 15 years of transportation experience behind him when he joined TWA in 1941. He had been manager of the Castle and Cooke Travel Bureau in the island city for 13 years, and prior to that had been associated with Thos. Cook & Son in San Francisco.

E. N. Laurence has been named acting works manager of the Miami Division of Consolidated Vultee Aircraft Corp., replacing R. E. Brown who has been transferred to the Allentown Division.

While at Chance Vought Laurence helped build the experimental ship, XF4O which is now seeing active service as the Navy's *Corsair*. He was born in England, but came to this country during the last war and has been connected with many aviation firms.

Col. Walter A. Jensen has been appointed Deputy Air Surgeon, AAF, Brig. Gen. David N. W. Grant, Air Surgeon, has announced. Col. Henry C. Chenault replaced Col. Jensen as executive officer.

Col. Leslie P. Arnold, formerly vice-president of PCA, is head of the intra-United Kingdom passenger, freight and mail airline of the ferry and transport service, Eighth USAF Service Command.

Capt. Carl Eaker, Western Air Lines transport pilot and a flying man in his own right with a million-mile record, took his first flying lessons from his brother, Maj. Gen. Ira Eaker, Commanding General of the U. S. Air Forces in Britain. The little-known relationship came to light recently when Capt. Eaker was introduced before making a speech in Los Angeles.

As the result of a recent reorganization program, **R. W. Cole** and **A. A. Green** are two new department heads at the Miami Division of Consolidated Vultee Aircraft Corp. Cole, who has been with the division since it opened in 1941, has been promoted from assistant treasurer to controller, and Green, formerly associated with Igor Sikorsky in the development of the helicopter, will be head of the new Product Engineering Department. **W. S. Leavcraft**, continuing to serve as division treasurer, also will assume the duties of chief of materials and chief of contracts.

Joseph T. Ogle (left), former field service representative for Wilcox-Rich Corp.

and Bohn Aluminum Brass Corp. and more recently field service supervisor for Glenn L. Martin Co., has been appointed assistant service manager in charge of Fairchild Aircraft division in charge of field service. **Kent Bradford** (right), manages the service division. Also appointed assistant service manager and in charge of spare parts for Fairchild, is **George W. Dress, Jr.**, formerly connected with General Motors Corp.

Robert J. Lindquist, vice-president and a director of Reynolds Metals Co., has joined Curtiss-Wright Corp. as vice-president in charge of finances. For years Lindquist was RFC chief auditor.

BACK FROM BATTLE:

Among the veteran test pilots of the AAF's Materiel Command center at Wright Field is Capt. Robert G. Ruegg, shown after completing a test flight. In the Philippines on Dec. 7, he and his bombardment group battled the Japs through the Southwest Pacific during the dark days of Singapore, Java and Burma.

WRIGHT FIELD'S TEST PILOTS:

Wright Field's test pilots are among the world's finest, but they seldom are pictured. Here they are shown with their data cards talking over individual flight problems. From the left: Lt. W. A. Lien, Lt. R. A. Bray, Lt. G. W. Williams, Lt. W. H. Bockman, Lt. J. R. Francisco, Lt. E. L. Sorenson, and Lt. P. J. Ritchie, all Army Air Force pilots.

FINANCIAL

* *

Significance Seen in National's Switch to Non-Aviation Holdings

Trend of trust's purchases to other securities expected to continue, at expense of air issues.

By ROGER WILCO

WHEN DOES an aviation trust cease to be an aviation trust? The answer is simply when it no longer confines its main activity to aviation. And that is precisely the direction being followed by National Aviation Corp.

▸ **Original Policy**—The company was originally created in June, 1928, for the "purpose of investing in securities of established companies in various lines of aviation activities, both manufacturing and transportation . . ." Shares in this enterprise were purchased primarily with the thought of participating in the aviation industry in all of its branches. The fund persisted in its stated policy—investing in both aircraft manufacturing and air transport equities. Small commitments were also made in airports and specialized research activities. At one time, the trust tried its hand in the formation and operation of a company devoted to the manufacture of carburetors but gave that up as an ill-fated venture.

▸ **Diversify Investments**—Within the last year, the management of National Aviation obtained stockholder approval to diversify its investments. The stated reason was that better results could be obtained if the fund could enter other industries besides aviation. This is just another way of saying that perhaps the aviation group does not hold the best opportunities for profit any more.

▸ **Revised Policies**—In any event, the fund's portfolio holdings as of June 30, 1943, reflect the revised management policies. As of that date, investments in non-aviation enterprises aggregated 12.6 per cent of its total resources. This compared with only 7 per cent as of December 31, 1942. Commitments in aircraft manufacturing companies were reduced to 47.7 per cent from 51.0 per cent and investments in airlines were cut to 24.2 per cent from 28.3 per cent. Cash and other quick assets declined to 15.5 per cent from 20.0 per cent.

▸ **Fewer Airlines Stocks**—Substantial reductions in airline securities were made during the second quarter. Issues sold included 2,500 Pan American, 700 American, 3,000 TWA, 4,900 United, 800 Eastern, 1,700 Northwest, 4,500 Penn-Central, 3,500 Braniff and 3,000 Chicago & Southern.

▸ **Second-Quarter Reductions**—It is significant that these substantial reductions in airline holdings were made in the second quarter while not a single share was disturbed during the first quarter of the year. The accompanying tabulation shows the complete aviation holdings of National Aviation Corp. as of June 30, 1943.

▸ **Aircraft Issues Effected**—Material reductions in aircraft manufacturing issues were also effected. In this instance, however, selling was distributed over the first half and not concentrated in any one quarter. For significant trends it is important to examine changes during the first six months of the year. In this period, the trust sold 17,200 Curtiss-Wright common, 5,200 Bell, 5,600 Grumman, 1,000 Consolidated-Vultee common, 20,000 Continental Aviation and Engineering and 6,000 Cessna. Unchanged were holdings in Bendix, Boeing, Lockheed, United Aircraft common and Thompson Products.

▸ **Douglas Leadership**—It is evident that National Aviation expects Douglas to do better than the rest of the aircraft industry—at least if the amount of relative investments are any criteria. About $500,000, at current market values, of the trust's resources or approximately 15 per cent of its total aircraft industry commitment is represented by this one investment.

The trust is also inclined to favor issues with an assured dividend income. As a result, preferred stocks of aircraft companies have been retained or increased.

The United Aircraft preferred commitment was increased from 500 to a total of 2,100 shares.

▸ **United's Regularity**—This investment is a conservative one as it is one of the few aircraft issues where it is possible to obtain a regular dividend income with some degree of assurance. On the whole, dividends on common stocks of aircraft companies, at best, are very irregular and dependent on prevailing conditions when payments may come up for consideration. Carrying a 5 per cent coupon, the United Aircraft preferred has a very high investment character and has been in demand as an income producer. This issue sold as high as $114.50 a share this year although it was originally offered around par—$100.

▸ **Curtiss-Wright**—Probably on similar reasoning, 20,000 shares of Curtiss-Wright "A" were undisturbed. This issue pays an annual dividend of $2 per share and is in no evident jeopardy. Not inconsequential was the increase from 3,600 to 10,000 shares in the holdings of Consolidated-Vultee 5 per cent preferred. Here, too, income appears to be the objective.

▸ **Non-Aviation Shares**—It may be of interest to note the non-aviation industrial shares acquired by National Aviation. These purchases were represented by 2,500 shares of each of the following companies: Firestone, General Electric, General Motors, Goodyear Tire and Gulf Oil. Oils were predominantly favored as 4,000 Phillips, 4,400 Standard Oil of California and 2,000 Standard Oil of New Jersey were also purchased this year.

If present trends are any indication, it is likely that National Aviation will acquire more non-aviation securities at the expense of present holdings of aircraft and air carrier issues.

Aviation Holdings of National Aviation Corp.

Airlines	Shares Held
American	2,100
Braniff	9,500
Chicago & Southern	12,450
Eastern	5,000
Mid-Continent	17,000
Northwest	13,200
Pan American	7,500
Penn-Central	12,900
Penn-Central ptd	4,200
TWA	6,000
United	9,100
Aircraft	**Shares Held**
Bell	24,300
Bendix	5,000
Boeing	17,500
Can Vultee	18,200
Con-Vultee pfd	10,000
Curtiss-Wright	7,800
Curtiss-Wright "A"	20,000
Douglas	7,900
Grumman	3,200
Lockheed	20,000
United Aircraft	18,500
United Aircraft pfd	2,100
Chandler-Evans	2,755
Thompson Products	5,000

PCA Will Retire 5,000 Preferred

Line to call in convertible shares September 6.

Pennsylvania-Central Airlines announces that Sept. 6 it will retire 5,000 shares of its convertible preferred stock called by lot. It is unlikely, however, that the line will be required to pay out the $135,000 principal amount indicated for this stock redemption. For all practical purposes, most of the preferred stock called for retirement may be expected to be converted into common. The preferred is currently convertible into common at the rate of two shares of common for each share of preferred. With the common currently selling around $17.50 per share, this would indicate an actual market value of $35 per preferred share as contrasted to the call price of $27.

▸ **Conversion Expires Aug. 27**—It would be well for all preferred stockholders of PCA to check their stock certificates to determine whether their shares are being called. The conversion right of the securities called will expire on Aug. 27, and a tangible loss will occur if action is not taken if shares drawn for retirement are not converted into common and sold.

▸ **Favorable Market**—While PCA is taking this action under the sinking fund provisions surrounding the preferred stock, there is little doubt that conversion is being forced in view of the favorable market conditions. About 4,000 shares of preferred have previously been converted into common, reducing by that amount the original issue of 75,000 shares. Through this conversion process, a senior issue is being gradually retired and the company is relieved of the annual dividend requirement of $1.25 per share.

▸ **Wide Range**—The preferred has experienced wide fluctuations in price since it was offered publicly at $25 per share in November, 1941. (The company received $22.75). Shortly after its offering, the stock slumped to about $17 per share. As airline fortunes generally improved, the PCA preferred moved upwards in harmony with its junior equity and at one time sold as high as $40 per share.

Curtiss-Wright Income Declines

Sales double in 1942 but profit drops from 1941.

Curtiss-Wright Corp. sales doubled during 1942, but the firm's net dropped to $14,143,515, equal to $1.46 a share on the common stock as compared with $25,717,512, or $3.15 a share in 1941.

▸ **Vaughan Reports** — Guy W. Vaughan, Curtiss-Wright president, in making the report said that federal income and excess profits taxes in 1942 amounted to $84,373,246, exclusive of a post-war refund of $7,993,000. In 1941, these taxes amounted to $91,535,277.

Sales in 1942 totaled $770,594,832 as compared with $373,083,365 in 1941.

Breeze Dividend

Company pays 40 cents, bringing year's total to $1.20.

Directors of Breeze Corporations, Inc., have declared a dividend of 40 cents a share on common stock, payable on Sept. 10 to holders of record Sept. 1, bringing dividend payments this year to $1.20.

The board surveyed a recently-completed building extension which doubles the square footage of the company's main office in Newark, N. J. It was said an addition to the Essex Tool and Die, Inc., Breeze subsidiary in East Orange, N. J., was contemplated.

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▸ **Packard Motor Car Co.** reporting on a six months' volume of war goods almost double the annual business of its greatest peacetime year, declared net earnings for the first half of 1943 to be $1,974,489, after provision of $9,913,411 for income and surtax, and excess profits taxes. Prices, however, received by the company for certain war products are subject to renegotiation. Increased production of Rolls-Royce engines for aircraft and Packard marine engines for PT boats represented half-year shipments totalling $160,622,308 against $66,435,663 for the same period last year.

Canadian Air Gain

Canada's air force has increased from 4,500 men before the war to approximately 180,000 men at the present time.

CAP Shows the Nation

Orders already announced and others yet to come assigning additional duties to Civil Air Patrol are bringing cheers to CAP's thousands of pilots and ground workers. The long period of uncertainty for CAP appears over. Organized the week before Pearl Harbor, CAP went to work at an amazing rate and has maintained the pace ever since.

The War Department and its air arm, the AAF, offered faint praise from time to time but no great encouragement. CAP was looked upon by the military as merely another upstart civilian defense enterprise which would have to be taken over and operated efficiently, or displaced, when the Army could get around to it.

Many observers, including some in CAP itself, were convinced CAP was doomed as an entity when it became an auxiliary of the Army Air Forces a few months ago. But the late Gen. Olds, former commanding general of the old Ferrying Command, had been impressed by CAP's work for him in his new command of the Second Air Force, and after 17 days of what was to be a 30-day experiment he was convinced. He had managed to spread the gospel of CAP among his Washington superiors before his death and that was the start of the pro-CAP movement in the AAF.

Now CAP is launching a national campaign to train 17-year-old AAF aviation cadets who will be inducted after their 18th birthday. Using the commonly accepted cost to train a cadet, set at $30,000, it is evident that CAP can save the government hundreds of thousands of dollars if it can prevent even a fraction of the usual number of washouts. The voluntary program already is described as a tremendous success by CAP officers.

CAP's courier service, which has been expanded since AAF affiliation, is making important contributions to post-war flying. Its grasshoppers of 65 hp or so are flying 20,000 mi. a day on regular routes and schedules for the Second Air Force alone, in an area from Spokane, Washington, to Iowa.

The South Dakota wing of CAP has flown upwards of 300,000 miles this year. Loads are constantly increasing, despite bad weather and a territory which is one of the most sparsely populated in the country. Yet a survey of the state's operation shows operating costs are *approaching a mill a pound mile*. This with 65-hp flying jeeps! This means that the cost to the government is dropping rapidly. It means, more significantly, that CAP is proving the post-war economy of the lightplane in airline traffic, tapping every community through feeder lines from coast to coast. While CAP's operation under commercial direction would have higher costs, other savings resulting from private operation would result. The 65-hp plane carries 250 lb. A few more horses would double this to 500 lb., with little increased cost. CAP is paving the way for the feeder airlines of tomorrow.

CAP's personnel, from its hard-working national commander, Lt. Col. Earle L. Johnson, and its operations officer, Col. Harry Blee, down to the part-time typists who contribute a few hours a week, are doing a job the nation should hear more about. A huge proportion of CAP's staff have never received a cent for their efforts.

Men have forsaken their business affairs to fly for CAP. They have used their own planes. James M. Landis, Director of Civilian Defense, paid tribute to them. "Dozens of CAP pilots have seen their planes—virtually irreplaceable for the duration—lost or seriously damaged during CAP operations." Their only recompense is a per diem, plus hourly allowances for operations, maintenance and aircraft depreciation, which always fail to meet total expenses.

CAP is already supporting the First and Second Air Forces, carrying mail, dispatches and vitally needed parts. More such work appears ahead. It is operating an extensive delivery service for mid-west war plants. Preventing stoppage of assembly lines by rapid delivery of tools or parts is almost a daily occurrence.

CAP has patrolled the coastlines more than 16,000,000 miles, in single-engine craft flying 30 to 50 miles at sea when its pilots didn't even have life preservers. It spotted more than 150 subs and actually prevented a number of attacks on merchantmen. It has patrolled the Mexican border, levees in flood areas, pipelines and other utilities. It has guarded vital war areas and government bases. It has searched and found lost planes and ground parties. It has flown blood plasma and any number of emergency commodities, including 500 lb. of teargas rushed from Pittsburgh to Detroit the other day to help quell a riot.

CAP with its corps of volunteers operating at a thousand airports has done a remarkable job toward winning the war.

It is gratifying that the top Army men now recognize what CAP is and what it means to the country. Like the pledge of more planes to the airlines, it is an indication that the Administration is awakening to the people's demand to give aviation its head in this war.

Robert H. Wood

They help keep 'em FLYING!

HERE ARE SIX young G-E turbosupercharger specialists home again in Lynn, Massachusetts, with W. A. Reeves, of General Electric's Supercharger Engineering Division—their old boss and mentor. They have just completed assignments that took them—and others like them—almost a million miles and to every fighting front. They have been teaching Allied ground crews how to service and maintain the turbosupercharger—that key aircraft accessory, developed by General Electric and the U.S. Army Air Forces, which permits our flyers to fight in high altitudes on a better-than-even basis. As a group, they may not know where they are going next, but they know where they have been—where American boys and American products, like the G-E amplidyne, d-c generator, and turbosupercharger, are fighting ceaselessly for freedom. *General Electric Company, Schenectady, N. Y.*

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